

An Analysis of National Open Data and Open Science Policies in Europe

Process and findings



Key:

● Full Coverage ◐ Partial Coverage ○ No Coverage



Research Funders	Policy Coverage		Policy Stipulations					Support Provided		
	Published outputs	Data	Time limits	Data plan	Sharing/ access	Long-term curation	Monitoring	Guidance	Repository	Data centre
AHRC	●	●	●	●	●	◐	○	●	○	◐
BBSRC	●	●	●	●	●	●	●	●	●	◐
EPSRC	●	●	●	◐	●	●	●	◐	○	○
ESRC	●	●	●	●	●	●	●	●	●	●
MRC	●	●	●	●	●	●	○	◐	●	●
NERC	●	●	●	●	●	●	●	●	●	●
STFC	●	●	●	●	●	●	●	◐	●	●
Cancer Research	●	●	●	●	●	●	●	◐	●	○
European Commission	●	●	◐	●	◐	◐	◐	●	●	◐
Wellcome Trust	●	●	●	●	●	●	●	●	●	●

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DCC-SPARC Europe collaboration

- The DCC is a centre of expertise in digital curation and data management. We maintain a watching brief on funders' research data policies (largely focused on the UK)
- SPARC Europe is a membership organisation comprising academic institutions, library consortia, funding bodies, research institutes and publishers. Their goal is "Advocating change in scholarly communications for the benefit of research and society"
- Since 2016 we have collaborated to extend DCC policy coverage to be more comprehensive at a European level, and broadening it to examine Open Research practice more generally
- Our collaboration goes beyond policy – e.g. briefing papers such as "The Open Data Citation Advantage" – but I will focus on the recent analysis of European national Open Data and Open Science policies

Scope/coverage

policy (n.) “a set of ideas or a plan of what to do in particular situations that has been agreed to officially by a group of people, or an organisation” ¹

- We looked primarily at national research data policies, not individual funders – although in countries with only one national research funder these can effectively be the same thing
- Specifically, this meant laws passed by parliament, national funder policies and research plans/roadmaps, concordats/agreements between multiple influential parties, and codes of research practice/integrity/ ethics, etc
- The last known analysis of this sort dates back to 2013, and much has changed since. Other data policy work has either looked at open government data or Open Access publications alone

¹ Lightly adapted from the Cambridge dictionary definition

Approach

- We began by compiling and briefly describing a list of national policies in the EU and some ERA states (IS, NO, CH)
 - This list is available as a standalone document (ref at the end), and will be refreshed twice a year for the next while...
- We sought intel from contacts gained from DCC involvement in European projects such as OpenAIRE and FOSTER, who helped identify the status of national approaches to research data, the processes by which these strategies were developed, and the context within which the policies exist
- Next step was analysis, comparison, grouping...

Findings (i) - policy types

- The documents we examined did not readily lend themselves to classification, but nonetheless we attempted to do it...
- Across the thirteen countries with existing policies in place, we identified:
 - **Six** funder policies (CY, DE, LT, PT, UK, NO)
 - **Four** national plans or roadmaps (DK, EE, FI, NL)
 - **Two** concordat-type documents (NL, UK)¹
 - **Two** laws (FR, LT)
 - **One** code of ethics (BE)
 - **One** white paper (CH)

¹ Some countries, such as the UK, have more than one national policy in place

Findings (ii) – organisations involved

- Identifying the lead, ranking or ‘sponsoring’ organisation was not always straightforward; at other times the documents were co-signed by multiple organisations on an equal footing...
 - **Seven** were led by (or otherwise involved) national public research funders (CY, DE, EE, LT, PT, UK, NO)
 - **Four** involved university representative bodies such as Universities UK (CH, CY, DK, UK)
 - **Four** were led by, or had the explicit support of, government ministries (BE, CY, FI, NL)
 - **Two** were laws passed by the national parliament (FR, LT)
 - **Two** approaches were led by the academic community (Rectors and Learned Societies) (BE, CH)
- Other organisational types were involved (as signatory, or as part of one or more working groups): national library, national ICT infrastructure provider, national (non-research) HE funder, and private research funder

Findings (iii) – scope/coverage

By definition, all of the policies addressed research data.

- **Seven** of the thirteen also addressed Open Access publication explicitly;
- **Six** addressed software, code, tools or models;
- **Five** addressed methods, workflows or protocols, and one addressed physical (non-digital) samples.

There was a roughly even split between policies which addressed open research data issues in isolation (6), and those considering data under a broader umbrella such as “Open Science” or “Open Access” (7).

- Majority are prescriptive/imperative (Thou shalt) ...as you might expect in a policy
- Monitoring of compliance/penalties (and reward/recognition!) not yet common
- Codes of ethical research conduct are often relevant, e.g. Belgium – more work needed

Prescriptive	Advisory
FI, FR, DE, LT, UK, CH, BE, DK, EE	CY, NL, PT, NO


Findings (iv) – age and provenance

- Mainly new – only 2 pre-date 2014
- Open public data policies (i.e. government data) often precede these, as do Open Access policies
- Some policies (e.g. UK) have their roots in earlier efforts from the same country, although not always from same sponsor/organisation
- Later policies have been influenced by earlier ones – H2020 and UK particularly influential

Policy exists	Work underway	No policy & no known work
BE, CY, DK, EE, FR, FI, DE, LT, NL, PT, UK, NO, CH	AT, BG, HR, IE, IT, PL, SI, ES, SE, IS	CZ ¹ , EL, HU, LV, LU, MT, RO, SK

¹ I'll return to the Czechs in a moment

Finally...

- Nets have holes in them! Merely searching Google doesn't give the full picture, as lots of detail is not available in English – our in-country contacts were hugely important
 - STOP PRESS (July): “We have CZ down as a country with no policy & no plans. Two Czech representatives in the audience told me that a policy was published just two weeks ago. I have their business cards and they will be in touch to tell us more about it. Until then, we can at least move CZ into the category of countries with a policy, albeit of an unknown nature at present”
- On the upside, two national policies (Estonia and Cyprus) are now, or will soon be, available in English as a direct result of our interest 
- The EC's Open Research Data Pilot for Horizon 2020 was cited in multiple policy documents (and by local contacts) as a direct driver and influencing force in the development of national approaches.
 - We found evidence that pan-European infrastructural efforts – such as OpenAIRE, PASTEUR4OA and FOSTER – are also bearing fruit in the policy arena
- From a UK standpoint, it is heartening to see how many national strategies and policy documents cite work carried out here: one can only hope that Brexit does not curb our influence. The G8 Science Ministers' Statement (2013), signed in London, will hopefully continue to help in this regard...

References / contact

- A Snapshot of Open Data and Open Science Policies in Europe (list of policies, March 2017) – <http://sparceurope.org/open-data-open-science-policy-europe/>
- An Analysis of Open Data and Open Science Policies in Europe (report, May 2017) – <http://sparceurope.org/new-sparc-europe-report-analyses-open-data-open-science-policies-europe/>
- The Open Data Citation Advantage (briefing paper, February 2017) – <http://sparceurope.org/open-data-citation-advantage/>
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